Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. The original filing indicated that the square-bracketed cross-referencing numbers are not to be regarded as part of the claims, thus such square-bracketed cross-referencing material has been removed in the below claims listing:

CLAIMS LISTING (all of presented claims 1-22, 23-34)

Claim 1 (*Currently Amended*): An isolation providing method comprising:

(a) defining a first oxidation stop layer ~~above~~ at a top surface portion of a first conductively-doped semiconductor layer;

(b) using atomic layer deposition (ALD) to adhere ~~providing~~ a first intrinsic silicon layer onto the first oxidation stop layer, wherein said use of atomic layer deposition (ALD) defines a thickness of the first intrinsic silicon layer ;

(c) thermally oxidizing at least a sublayer portion of the first intrinsic silicon layer so as to thereby create a corresponding and thermally-grown, first intrinsic silicon oxide sublayer over the first semiconductor layer; and

(d) disposing a second conductively-doped semiconductor layer above the first intrinsic silicon oxide sublayer so that the first intrinsic silicon oxide sublayer provides isolation between the first and second conductively-doped semiconductor layers.

Claim 2 (*Original*): The isolation providing method of Claim 1 wherein:

(c.1) said thermally-grown, first intrinsic silicon oxide sublayer includes stoichiometric silicon dioxide (SiO_2).

Claim 3 (*Canceled*): ~~The isolation providing method of Claim 1 wherein:~~

~~(b.1) said providing of the first intrinsic silicon layer includes using atomic layer deposition (ALD) to define a thickness of the first intrinsic silicon layer.~~

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Claim 4 (*Currently Amended*): The isolation providing method of Claim 1 ~~3~~ wherein:

(b.2) said thickness of the first intrinsic silicon layer is in a range of about 15Å to about 50Å.

Claim 5 (*Original*): The isolation providing method of Claim 4 wherein:

(a.1) said defining of the first oxidation stop layer includes creating a first silicon nitride composition having a nitrogen concentration of at least about 5% atomic.

Claim 6 (*Original*): The isolation providing method of Claim 5 wherein:

(a.1a) said first silicon nitride composition has a nitrogen concentration of at least about 10% atomic.

Claim 7 (*Currently Amended*): The isolation providing method of Claim 5 wherein:

(a.2) said creating of the first silicon nitride composition includes using Decoupled Plasma Nitridation (DPN) to introduce nitrogen into the top surface portion of the first conductively-doped semiconductor layer.

Claim 8 (*Currently Amended*): The isolation providing method of Claim 5 wherein:

(a.2) said creating of the first silicon nitride composition includes using Remote Plasma Nitridation (RPN) to introduce nitrogen into the top surface portion of the first conductively-doped semiconductor layer.

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Claim 9 (*Currently Amended*): The isolation providing method of Claim 5 wherein:

(a.2) said creating of the first silicon nitride composition includes using ion implant to introduce nitrogen into the top surface portion of the first conductively-doped semiconductor layer.

Claim 10 (*Original*): The isolation providing method of Claim 1 and further characterized by:

(c.1) continuing said oxidizing of the first intrinsic silicon layer at least until a corresponding first oxidation front crosses into the first oxidation stop layer so as to thereby perfect formation of silicon dioxide in the thermally-oxidized, first intrinsic silicon layer.

Claim 11 (*Original*): The isolation providing method of Claim 10 and further characterized by:

(c.2) continuing said oxidizing of the first intrinsic silicon layer yet further so as to consume silicon atoms within the first oxidation stop layer and so as to thereby produce additional silicon oxide from the consumed silicon atoms.

Claim 12 (*Original*): The isolation providing method of Claim 10 and further comprising:

(e) providing a silicon nitride layer between the first and second conductively-doped semiconductor layers so that the combination of the silicon nitride layer and the perfected silicon dioxide in the thermally-oxidized, first intrinsic silicon layer provide isolation between the first and second conductively-doped semiconductor layers.

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Claim 13 (*Original*): The isolation providing method of Claim 12 and further comprising:

(f) providing a second silicon oxide layer between the silicon nitride layer and the second conductively-doped semiconductor layer so that the combination of the second silicon oxide layer, the silicon nitride layer and the perfected silicon dioxide in the thermally-oxidized, first intrinsic silicon layer provide isolation between the first and second conductively-doped semiconductor layers.

Claim 14 (*Currently Amended*): The isolation providing method of Claim 1 and further comprising:

(e) providing a silicon nitride layer between the first and second conductively-doped semiconductor layers so that the combination of the silicon nitride layer and the first intrinsic silicon oxide sublayer provide isolation between the first and second conductively-doped semiconductor layers <u>where said silicon nitride layer is separate from said first oxidation stop layer</u>.

Claim 15 (*Original*): The isolation providing method of Claim 14 and further comprising:

(f) providing a second silicon oxide layer between the silicon nitride layer and the second conductively-doped semiconductor layer so that the combination of the second silicon oxide layer, the silicon nitride layer and the first intrinsic silicon oxide sublayer provide isolation between the first and second conductively-doped semiconductor layers.

Claims 16-21 (*Canceled*).

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Claim 22 (*Currently Amended*): A method of forming insulation comprising:

(a) defining an oxidation stop layer ~~above~~ <u>in a top portion of</u> a first conductively-doped semiconductor layer;

(b) providing an essentially undoped semiconductor layer on the first conductively-doped semiconductor layer and above the first oxidation stop layer;

(c) oxidizing ~~at least a sublayer portion of~~ the essentially undoped semiconductor layer so as to thereby create a corresponding, essentially undoped and thermally-grown, first oxide sublayer over the first conductively-doped semiconductor layer; and

(d) disposing a second conductively-doped semiconductor layer above the first oxide sublayer so that the first oxide sublayer provides electrical insulation between the first and second conductively-doped semiconductor layers.

Claim 23 (*New*): The insulation forming method of Claim 22 wherein:

(a.1) said defining of the oxidation stop layer includes introducing nitrogen into the top portion of a first conductively-doped semiconductor layer.

Claim 24 (*New*): The insulation forming method of Claim 23 wherein:

(a.1a) said introducing of the nitrogen into the top portion includes causing the introduced nitrogen to exhibit a concentration gradient.

Claim 25 (*New*): The insulation forming method of Claim 22 wherein:

(a.1) said defining of the oxidation stop layer includes defining an adhesion surface on the top portion of a first conductively-doped semiconductor layer for adhering to the essentially undoped semiconductor layer.

Claim 26 (*New*): The insulation forming method of Claim 25 wherein:

(b.1) said providing of the essentially undoped semiconductor layer includes chemisorbing a first reactant monolayer to the adhesion surface on the top portion of a first conductively-doped semiconductor layer, where the first reactant monolayer can react with a subsequently provided, second reactant to form a base monolayer of said essentially undoped semiconductor layer.

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Claim 27 (*New*): The isolation providing method of Claim 1 wherein:

(a.1) the first oxidation stop layer includes a graduated concentration of nitrogen with a lower concentration of nitrogen being present at a top adhesion surface of the first oxidation stop layer where the first intrinsic silicon layer will adhere than deeper down in the first oxidation stop layer.

Claim 28 (*New*): The isolation providing method of Claim 1 wherein:

(a.1) the first oxidation stop layer includes a graduated concentration of oxygen with a higher concentration of oxygen being present at a top adhesion surface of the first oxidation stop layer where the first intrinsic silicon layer will adhere than deeper down in the first oxidation stop layer.

Claim 29 (*New*): The isolation providing method of Claim 1 wherein:

(b.1) said use of atomic layer deposition (ALD) includes chemisorbing a monolayer of a first silicon-containing reactant to a top adhesion surface of the first oxidation stop layer.

Claim 30 (*New*): A method of providing a high quality silicon dioxide layer atop a first conductively-doped semiconductor layer, the method comprising:

(a) introducing nitrogen into the first conductively-doped semiconductor layer through a top portion of the first conductively-doped semiconductor layer;

(b) adhering an essentially undoped silicon layer to the top portion of the first conductively-doped semiconductor layer;

(c) thermally oxidizing the adhered and essentially undoped silicon layer at least until a corresponding oxidation front of said thermal oxidizing step reaches the nitrogen introduced into the first conductively-doped semiconductor layer; and

(d) continuing said thermal oxidizing step beyond when the corresponding oxidation front reaches the introduced nitrogen.

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Claim 31 (*New*): The providing method of Claim 30 wherein:

(b.1) said adhering includes using of atomic layer deposition (ALD) to adhere a predefined number of monolayers of essentially undoped silicon to the top portion of the first conductively-doped semiconductor layer.

Claim 32 (*New*): The providing method of Claim 31 and further comprising:

(e) disposing a second conductively-doped semiconductor layer above the thermally oxidized and essentially undoped silicon layer.

Claim 33 (*New*): The providing method of Claim 32 and further comprising:

(f) interposing a silicon nitride layer between the thermally oxidized and essentially undoped silicon layer and the second conductively-doped semiconductor layer.

Claim 34 (*New*): The providing method of Claim 32 and further comprising:

(g) interposing a silicon oxide layer between the silicon nitride layer and the second conductively-doped semiconductor layer.

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